

TECHNICAL REPORT OF U.S. ARMY AIRCRAFT ACCIDENT **PART VII - IN-FLIGHT OR TERRAIN IMPACT AND CRASH DAMAGE DATA**

For use of this form, see DA Pamphlet 385-40; the proponent agency is OCSA.

REQUIREMENTS CONTROL SYMBOL
CSOCS-309

1. IN-FLIGHT COLLISION KINEMATICS AT INSTANT OF IMPACT

a. Airspeed at Impact (*knots*) _____

b. Vertical Speed (*feet per minute*) _____

☐ Up ☐ Down

c. Flight Path Angle (*degrees*) _____

☐ Up ☐ Down

d. In-Flight Attitude At Impact



Degrees _____ ☐ Up ☐ Down



Degrees _____ ☐ Left ☐ Right

f. Obstacle Strike Sequence (*Enter 1, 2, 3, etc. to show sequence of strike*)

<input type="checkbox"/> Prop/Rotor	<input type="checkbox"/> Landing Gear
<input type="checkbox"/> Rotor Mast	<input type="checkbox"/> Wing
<input type="checkbox"/> Tail Rotor	<input type="checkbox"/> Empennage
<input type="checkbox"/> Tail Boom	<input type="checkbox"/> WSPS
<input type="checkbox"/> Windscreen	<input type="checkbox"/> FLIR
<input type="checkbox"/> LWR Nose/Gun Turret	<input type="checkbox"/> Other (<i>Specify</i>) _____

g. Obstacle Conspicuity (*Within accident distance from pilot's position, the obstacle in its surroundings was obscured*)

(1) ☐ Completely (2) ☐ Partially (3) ☐ Not Obscured

h. Wire or Cable Description

Type	Dia In Inches	No. Struck
(1) Power Transmission		
(2) Telephone or TV		
(3) Bracing (<i>guy/support</i>)		
(4) Other (<i>Specify</i>)		

i. WSPS (1) Installed ☐ Yes ☐ No
 (2) Cut Wire ☐ Yes ☐ No

j. Obstacle Struck Other Than Wire (*diameter in inches*) _____

e. Obstacle Identity And Collision Height

Obstacle	Collision Height Above Ground (<i>feet</i>)
(1) <input type="checkbox"/> Birds	
(2) <input type="checkbox"/> Aircraft	
(3) <input type="checkbox"/> Wires/Cables	
(4) <input type="checkbox"/> Vehicles	
(5) <input type="checkbox"/> Tree	
(6) <input type="checkbox"/> Other	

2. TERRAIN COLLISION KINEMATICS AT INSTANT OF MAJOR IMPACT

a. Ground Speed at Impact _____ (*knots*)

b. Vertical Speed _____

☐ Up ☐ Down

c. Flight Path Angle _____

☐ Up ☐ Down

d. Indicate by Check Marks Which Two of The Three Preceding Parameters (*a, b, c*) Are The Most Accurate

a. ☐ b. ☐ c. ☐

e. Impact Angle _____

(*degrees*)

f. Attitude at Major Impact

(1) Pitch

(2) Roll

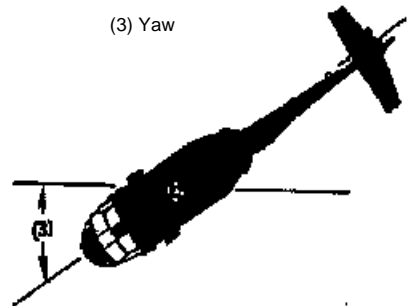
(3) Yaw



Degrees _____ ☐ Up ☐ Down



Degrees _____ ☐ Left ☐ Right



Degrees _____ ☐ Left ☐ Right

3. ROTATION AFTER MAJOR IMPACT

a. Did Aircraft Rotate About Any Axis After The Above Major Impact (*If yes, complete items b, c, and d*)
☐ Yes ☐ No ☐ Unknown

b. Roll Degrees

☐ Left ☐ Right Degrees _____

c. Yaw Degrees

☐ Left ☐ Right Degrees _____

d. Pitch Degrees

☐ Up ☐ Down Degrees _____

4. IMPACT FORCES RELATIVE TO AIRCRAFT AXES (*G's*)

a. Vertical (*G's*)

☐ Up ☐ Down *G's* _____

b. Longitudinal (*G's*)

☐ Fore ☐ Aft *G's* _____

c. Lateral (*G's*)

☐ Left ☐ Right *G's* _____

5. CASE NO.

a. Date (YYYYMMDD)

b. Time

c. Acft Serial No.

6. OTHER ACFT SERIAL NO.

7. FUSELAGE INWARD DEFORMATION OR COLLAPSE AND INJURY RELATIONSHIP <i>(Check appropriate boxes)</i>									
Fuselage Area	Amount or Type of Deformation or Collapse	Specific Area of Deformation or Collapse				Fuselage Deformation Produced/Contributed to Injury			
		Cockpit (1)	Forward Cabin Area (2)	Mid Cabin Area (3)	Rear Cabin Area (4)	Cockpit (5)	Forward Cabin Area (6)	Mid Cabin Area (7)	Rear Cabin Area (8)
a. Roof	Up to 1 Foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	More Than 1 Foot But Less Than 3 Feet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	More Than 3 Feet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Left Side	Up to 1 Foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	More Than 1 Foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Right Side	Up to 1 Foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	More Than 1 Foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Nose	Up to 1 Foot	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
	More Than 1 Foot	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
e. Floor	Up to 1 Foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	More Than 1 Foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Floor <i>(local deformation under seats)</i>	Vertical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Sideward	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Forward/Rearward	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. LARGE COMPONENT DISPLACEMENT <i>(Check appropriate boxes)</i>				
Component	Displaced (1)	Torn Free (2)	Cockpit Penetrated/Entered (3)	Cabin Penetrated/Entered (4)
a. Transmission <i>(forward or main)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Transmission <i>(rear)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Rotor Blade <i>(forward or main)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Rotor Blade <i>(rear or tail)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Landing Gear <i>(specify location)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Other <i>(specify)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. FLUID SPILLAGE					
a. Equipped With Crashworthy Fuel System <input type="checkbox"/> Yes <input type="checkbox"/> No	b. If So Equipped, Did Breakaway Valves Separate as Designed <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	e. Amount and Type Fluid Spilled			
		Gallons	Fuel <i>(Type)</i>	Oil <i>(Type)</i>	Hyd Fluid <i>(Type)</i>
		0 - 1			
		> 1 - 2			
c. Flammable Fluid Spillage Occurred <input type="checkbox"/> Yes <input type="checkbox"/> No	d. Auxiliary Fuel Tanks Installed <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Internal <input type="checkbox"/> External Crashworthy <input type="checkbox"/> Yes <input type="checkbox"/> No	> 2 - 10			
		> 10 - 20			
		> 20			

10. SPILLAGE SOURCE			
Part	a. Part Name/Nomenclature	b. Part Number	c. National Stock No.
(1) Cell/Tank/Reservoir			
(2) Filter			
(3) Fitting			
(4) Fluid Line			
(5) Valve			
(6) Breakaway Valve			
(7) Other <i>(Specify)</i>			
(8) Other <i>(Specify)</i>			
(9) Other <i>(Specify)</i>			

11. REMARKS